

From: [MASTERSON Kevin](#)
To: [Marylou Soscia/R10/USEPA/US@EPA](#); [Elena B Nilsen](#); [Jennifer L Morace](#); [sarounds@usgs.gov](#); [COYLE Jim](#); [ADES Dennis R](#); [LUT Agnes](#); [Chauncey Anderson](#); [DRAKE Doug](#); [Eric Blischke/R10/USEPA/US@EPA](#)
Subject: PBDE sources & pathways
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Attachments: [Noel et al 2009.pdf](#)

FYI - Thought you might be interested in this journal article we came across regarding PBDEs reaching western Canada. Here's the abstract:

In order to distinguish between 'local' and 'background' sources of polychlorinated biphenyls (PCBs) and polybrominated diphenyl ethers (PBDEs) in coastal British Columbia (Canada) air, we collected samples from two sites: a remote site on western Vancouver Island, and a near-urban site in the Strait of Georgia. Seasonally-integrated samples of vapor, particulate, and rain were collected continuously during 365 days for analysis of 275 PCB and PBDE congeners. While deposition of the legacy PCBs was similar at both sampling sites, deposition of PBDEs at the remote site amounted to 42% (10.4 mg/ha/year) of that at the near-urban site. Additional research into atmospheric circulation in the NE Pacific Ocean will provide more insight into the transport and fate of priority pollutants in this region, but trans-Pacific delivery of PBDEs to the west coast of North America may underlie in part our observations. For example, approximately 40% of >12,000 ten-day back trajectories calculated for the remote site originated over Asia, compared to only 2% over North America.

This type of research can have implications on the types of pollution prevention and pollution control strategies we pursue. If much of the loading is coming from "trans-Pacific delivery", we need to think about how much effort we put into local source control and/or prevention. The tools we use to control loadings to the environment can be informed by such findings.

Kevin

Kevin Masterson
Agency Toxics Coordinator
Oregon Department of Environmental Quality
811 SW 6th Avenue
Portland, OR 97202
Ph. (503) 229-5615
masterson.kevin@deq.state.or.us